

| TRANSMITTAL LETTER   |                              |                     | Case No. 3614/172      |
|--|------------------------------|---------------------|------------------------|
| Serial No.<br>10/606,117   | Filing Date<br>June 24, 2003 | Examiner<br>Unknown | Group Art Unit<br>3762 |
| Inventor(s)<br>A. Chow   |                              |                     |                        |
| Title of Invention<br>Method And Apparatus For Treatment Of Degenerative Retinal Disease Via Indirect Electrical Stimulation |                              |                     |                        |

TO THE COMMISSIONER FOR PATENTS

Transmitted herewith is Transmittal Letter (in duplicate); Information Disclosure Statement; PTO Form 1449; Copies of references identified with a \*\*\* on the attached PTO Form 1449.

- ☐ Small entity status of this application under 37 CFR § 1.27 has been established by verified statement previously submitted.
- ☐ Applicant claims small entity status. See 37 CFR 1.27.
- ☐ Petition for a \_\_\_\_\_ month extension of time.
- ☐ No additional fee is required.
- ☐ The fee has been calculated as shown below:

|   |                                  |       |                                 |               | Small Entity    |           | or | Other Than Small Entity |           |
|---|----------------------------------|-------|---------------------------------|---------------|-----------------|-----------|----|-------------------------|-----------|
|   | Claims Remaining After Amendment |       | Highest No. Previously Paid For | Present Extra | Rate            | Add'l Fee |    | Rate                    | Add'l Fee |
| Total                                     |                                  | Minus |                                 |               | x \$9=          |           |    | x \$18=                 |           |
| Indep.                                    |                                  | Minus |                                 |               | x 43=           |           |    | x \$86=                 |           |
| First Presentation of Multiple Dep. Claim |                                  |       |                                 |               | +\$145=         |           |    | +\$290=                 |           |
|   |                                  |       |                                 |               | Total add'l fee | \$        |    | Total add'l fee         | \$        |

- ☐ Please charge Deposit Account No. 23-1925 (BRINKS HOFER GILSON & LIONE) in the amount of \$\_\_\_\_\_. A duplicate copy of this sheet is enclosed.
- ☐ A check in the amount of \$\_\_\_\_\_ to cover the filing fee is enclosed.
- ☒ The Commissioner is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this communication or credit any overpayment to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.
- ☒ I hereby petition under 37 CFR § 1.136(a) for any extension of time required to ensure that this paper is timely filed. Please charge any associated fees which have not otherwise been paid to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to:  
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Kent E. Genin

Name of Applicant, Assignee or  
Registered Representative

*Kent E. Genin*

Signature

*March 8, 2004*

Date of Signature

Our Case No.: 3614/172

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

A. Chow

Serial No.: 10/606,117

Filing Date: June 24, 2003

For: METHOD AND APPARATUS FOR  
TREATMENT OF DEGENERATIVE  
RETINAL DISEASE VIA INDIRECT  
ELECTRICAL STIMULATION

Examiner: Unknown

Group Art Unit No.: 3762

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed below and on the attached Form PTO-1449 be considered by the Examiner and

made of record. Copies of the documents enclosed with this IDS are denoted with an asterisk (\*). All other documents were previously cited or submitted in the parent application, Serial No. 10/056,793, filed January 23, 2002 to which Applicant claims priority under 35 U.S.C. §120, and therefore copies of these previously cited or submitted references are not provided pursuant to 37 C.F.R. §1.98(d).

The references now cited are the following:

**U.S. PATENTS**

| <u>Patent No.</u> | <u>Date</u> | <u>Inventor</u>       |
|-------------------|-------------|-----------------------|
| * 793,004         | 06/20/1905  | May                   |
| * 1,684,860       | 09/18/1928  | Catlin                |
| * 2,525,381       | 10/10/1950  | Tower                 |
| * 2,721,316       | 10/18/1955  | Shaw                  |
| 2,760,483         | 08/28/1956  | Tassicker             |
| * 3,320,947       | 05/23/1967  | Knoll                 |
| 3,594,823         | 07/27/1971  | Collins               |
| 3,628,193         | 12/21/1971  | Collins               |
| * 3,699,970       | 10/24/1972  | Brindley et al.       |
| 3,766,311         | 10/16/1973  | Boll                  |
| * 3,769,961       | 11/06/1973  | Fatt et al.           |
| 3,848,608         | 11/19/1974  | Leonard               |
| * 3,893,444       | 07.08/1975  | Fatt                  |
| 3,914,800         | 10/28/1975  | Collins               |
| * 3,995,635       | 12/07/1976  | Higuchi et al.        |
| * 3,998,659       | 12/21/1976  | Wakefield             |
| 4,001,867         | 01/04/1977  | Kravitz et al.        |
| * 4,018,218       | 04/19/1977  | Carlson et al.        |
| * 4,089,329       | 05/16/1978  | Couvillon, Jr. et al. |
| 4,211,474         | 07/08/1980  | Le Goff               |
| 4,251,887         | 02/24/1981  | Anis                  |
| * 4,271,841       | 06/09/1981  | Friedman              |
| 4,272,910         | 06/16/1981  | Danz                  |
| * 4,326,529       | 04/27/1982  | Doss et al.           |
| * 4,484,922       | 11/27/1984  | Rosenwald             |
| * 4,524,776       | 06/25/1985  | Withers et al.        |
| 4,551,149         | 11/05/1985  | Sciarra               |
| 4,600,004         | 07/15/1986  | Lopez et al.          |
| 4,601,545         | 07/22/1986  | Kern                  |

| <u>Patent No.</u> | <u>Date</u> | <u>Inventor</u>    |
|-------------------|-------------|--------------------|
| * 4,603,697       | 08/05/1986  | Kamerling          |
| * 4,614,193       | 09/30/1986  | Liss et al.        |
| 4,628,933         | 12/16/1986  | Michelson          |
| * 4,664,117       | 05/12/1987  | Beck               |
| * 4,667,676       | 05/26/1987  | Guinta             |
| 4,679,572         | 07/14/1987  | Baker, Jr.         |
| 4,750,498         | 06/14/1988  | Graham             |
| 4,810,050         | 03/07/1989  | Hooper             |
| 4,832,202         | 05/23/1989  | Newman et al.      |
| 4,873,448         | 10/10/1989  | Shirai             |
| * 4,874,237       | 10/17/1989  | Cringle            |
| * 4,955,378       | 09/11/1990  | Grasso             |
| 4,978,842         | 12/18/1990  | Hinton et al.      |
| * 4,979,508       | 12/25/1990  | Beck               |
| * 4,989,605       | 02/05/1991  | Rossen             |
| 5,016,633         | 05/21/1991  | Chow               |
| 5,024,223         | 06/18/1991  | Chow               |
| * 5,025,811       | 06/25/1991  | Dobrogowski et al. |
| * 5,099,829       | 03/31/1992  | Wu                 |
| 5,109,844         | 05/05/1992  | de Juan Jr. et al. |
| * 5,109,846       | 05/05/1992  | Thomas             |
| 5,130,528         | 07/14/1992  | Phillips, Jr.      |
| 5,130,776         | 07/14/1992  | Popovic et al.     |
| * 5,147,284       | 09/15/1992  | Fedorov et al.     |
| * 5,154,174       | 10/13/1992  | Hawlina            |
| 5,159,927         | 11/03/1992  | Schmid             |
| * 5,174,304       | 12/29/1992  | Latina et al.      |
| 5,223,728         | 06/29/1993  | Gempe              |
| 5,256,882         | 10/26/1993  | Miyasaka           |
| 5,338,991         | 08/16/1994  | Lu                 |
| 5,351,309         | 09/27/1994  | Lee et al.         |
| * 5,360,438       | 11/01/1994  | Fisher             |
| 5,397,350         | 03/14/1995  | Chow et al.        |
| 5,411,540         | 05/02/1995  | Edell et al.       |
| 5,476,494         | 12/19/1995  | Edell et al.       |
| 5,491,349         | 02/13/1996  | Komoto et al.      |
| * 5,496,355       | 03/05/1996  | Lipsky             |
| * 5,522,864       | 06/04/1996  | Wallace et al.     |
| 5,556,423         | 09/17/1996  | Chow et al.        |
| * 5,578,040       | 11/26/1996  | Smith              |
| 5,648,655         | 07/15/1997  | Rostoker           |
| * 5,674,263       | 10/07/1997  | Yamamoto et al.    |
| 5,717,201         | 02/10/1998  | Lin et al.         |
| * 5,782,894       | 07/21/1998  | Israel             |

| <u>Patent No.</u>    | <u>Date</u> | <u>Inventor</u>  |
|----------------------|-------------|------------------|
| 5,837,995            | 11/17/1998  | Chow et al.      |
| * 5,843,147          | 12/01/1998  | Testerman et al. |
| 5,865,839            | 02/02/1999  | Doorish          |
| 5,895,414            | 04/20/1999  | Sanchez-Zambrano |
| 5,895,415            | 04/20/1999  | Chow et al.      |
| 5,935,155            | 08/10/1999  | Humayun et al.   |
| 5,944,747            | 08/31/1999  | Greenberg et al. |
| * 6,006,756          | 12/28/1999  | Shadduck         |
| * 6,007,477          | 12/28/1999  | Demenezes        |
| 6,032,062            | 02/29/2000  | Nisch            |
| * 6,035,236          | 03/07/2000  | Jarding et al.   |
| 6,066,675            | 05/23/2000  | Wen et al.       |
| * 6,083,251          | 07/04/2000  | Shindo           |
| * 6,101,411          | 08/08/2000  | Newsome          |
| 6,230,057 B1         | 05/08/2001  | Chow et al.      |
| * 6,264,971 B1       | 07/24/2001  | Darougar et al.  |
| * 6,275,735 B1       | 08/14/2001  | Jarding et al.   |
| * 6,282,449 B1       | 08/28/2001  | Kamerling et al. |
| 6,298,270 B1         | 10/02/2001  | Nisch et al.     |
| 6,324,429 B1         | 11/27/2001  | Shire et al.     |
| 6,347,250 B1         | 02/12/2002  | Nisch et al.     |
| 6,389,317 B1         | 05/14/2002  | Chow et al.      |
| 6,393,327 B1         | 05/21/2002  | Scribner         |
| US 2002/014764 A1    | 10/10/2002  | Peyman           |
| * US 2003/0139784 A1 | 07/24/2003  | Morimoto et al.  |

### FOREIGN DOCUMENTS

| <u>Document No.</u> | <u>Date</u> | <u>Country</u> |
|---------------------|-------------|----------------|
| DE 195 29 371 C2    | 02/13/1997  | Germany        |
| GB 2 229 543 A      | 09/26/1990  | Great Britain  |
| EP 0 084 621 A2     | 11/23/1982  | EPO            |
| EP 0 233 789        | 08/26/1987  | EPO            |
| EP 0 501 904 A2     | 09/02/1992  | EPO            |
| * EP 0 325 201 A2   | 07/26/1989  | Europe         |
| * JP A 8-154897     | 06/18/1996  | Japan          |
| * JP A 9-266954     | 10/14/1997  | Japan          |
| * JP A 2000-24122   | 01/25/2000  | Japan          |
| * RU 2 025 114 C1   | 12/30/1994  | Russia         |
| * RU 2 054 909 C1   | 02/27/1996  | Russia         |
| * RU 2 062 080 C1   | 06/20/1996  | Russia         |
| * RU 2 062 128 C1   | 06/20/1996  | Russia         |
| * RU 2 063 199 C1   | 07/10/1996  | Russia         |

| <u>Document No.</u> | <u>Date</u> | <u>Country</u> |
|---------------------|-------------|----------------|
| * RU 2 072 815 C1   | 02/10/1997  | Russia         |
| * RU 2 074 681 C1   | 03/10/1997  | Russia         |
| * RU 2 074 684 C1   | 03/10/1997  | Russia         |
| * RU 2 077 291 C1   | 04/20/1997  | Russia         |
| * RU 2 086 216 C1   | 08/10/1997  | Russia         |
| * RU 2 089 144 C1   | 09/10/1997  | Russia         |
| * RU 2 090 167 C1   | 09/20/1997  | Russia         |
| * RU 2 093 118 C1   | 10/20/1997  | Russia         |
| * RU 2 098 009 C1   | 12/10/1997  | Russia         |
| * RU 2 098 056 C1   | 12/10/1997  | Russia         |
| * RU 2 102 046 C1   | 01/20/1998  | Russia         |
| * RU 2 128 485 C1   | 04/10/1999  | Russia         |
| * RU 2 146 909 C1   | 12/17/1998  | Russia         |
| * RU 2 161 019 C1   | 12/27/2000  | Russia         |
| * RU 2 177 766 C2   | 02/09/2000  | Russia         |
| * RU 2 189 800 C2   | 03/01/2000  | Russia         |
| * SU 1044283 A      | 09/30/1983  | Soviet Union   |
| * SU 1139446 A      | 02/15/1985  | Soviet Union   |
| * SU 1386208 A1     | 04/07/1988  | Soviet Union   |
| * SU 1395316 A2     | 05/15/1988  | Soviet Union   |
| * SU 1409264 A1     | 05/15/1988  | Soviet Union   |
| * SU 1757666 A1     | 08/30/1992  | Soviet Union   |
| * SU 1766401 A1     | 10/07/1992  | Soviet Union   |
| * SU 1801021 A3     | 03/07/1993  | Soviet Union   |
| * SU 1826174 A1     | 11/10/1996  | Soviet Union   |
| * SU 1827222 A1     | 07/15/1993  | Soviet Union   |
| * SU 1833730 A1     | 08/15/1993  | Soviet Union   |
| * SU 1837858 A3     | 08/30/1993  | Soviet Union   |
| * SU 554863         | 04/25/1977  | Soviet Union   |
| * SU 839529         | 06/23/1981  | Soviet Union   |
| * SU 939020         | 06/30/1982  | Soviet Union   |
| * O 325 201 A2      | 07/26/1989  | Europe         |
| * WO 81/01511       | 06/11/1981  | PCT            |

#### OTHER ART

Abrams, Dr. Susan B., "Implanted photodiodes could restore lost vision", *Biophotonics Research*, 1997, 2 pages.

Acheson, A., P.A. Barker, R.F. Alderson, F.D. Miller, et al., "Detection of Brain-Derived Neurotrophic Factor-Like Activity in Fibroblasts and Schwann Cells: Inhibition by Antibodies to NGF", *Neuron*, Vol. 7, 1991, pp 265-75.

Ando, Haruhisa, et al. "Design Consideration and Performance of a New MOS Imaging Device", *IEEE*, 1985, 6 pages.

Armington, J.C., Brigell, M., "Effects of Stimulus Location and Pattern Upon the Visually Evoked Cortical Potential and the Electroretinogram," *Intern. J. Neuroscience*, Vol. 14, 1981, pp 169-178.

Baylor, D.A., Fuortes, M.G.F., "Electrical Responses of Single Cones in the Retina of the Turtle," *J. Physiol*, Vol. 207, 1970, pp 77-92.

Bergmann-Schaefer, "Lehrbuch der Experimentalphysik" (Textbook of Experimental Physics), vol. II, "Electricity and Magnetism" by Prof. Dr. -Ing. H. Gobrecht, 1971, 3 pp. plus translation.

Bobsch, M.D., Joseph M. and Grosser, Ph.D., Morton "Newer Repair at the AXOM Level: A Merger of Microsurgery and Microelectronics," VCH Publishers, Inc., 1967.

Boettner, E.A., Wolter, J.R., "Transmission of the Ocular Media," *Investigative Ophthalmology*, Vol. 1, 1962, pp 776-783.

Bosco, A., and Linden, R., "BDNF and NT-4 Differentially Modulate Neurite Outgrowth in Developing Retinal Ganglion Cells", *J Neurosci Res*. Vol. 57, 1999, pp 759-69.

Brady, G.S., Clauser, H.R., *Materials Handbook, Thirteenth Edition*, New York, McGraw-Hill, 1991, pp 739-740.

Brindley, G.S., "The Site of Electrical Excitation of the Human Eye," *J. Physiol.*, Vol. 127, 1955, pp 189-200.

Brindley, G.S., "Beats Produced by Simultaneous Stimulation of the Human Eye with Intermittent Light and Intermittent or Alternating Electric Current," *J. Physiol.*, Vol. 164, 1962, pp 156-167.

Brown, M.G. et al., "Monolithically Integrated 1 x 12 Array of Planar InGaAs/InP Photodiodes," *Journal of Lightwave Technology*, Vol. LT-4, No. 3, March 1986, pp. 283-286.

Caleo, M., Lodovichi, C., and Maffei, L., "Effects of Nerve Growth Factor on Visual Cortical Plasticity Require Afferent Electrical Activity", *Eur. J. Neurosci.*, Vol. 11, 1999, pp 2979-84.

Carmignoto, G., Maffei, L., Candeo, P., Canella, R. and Comelli, C., "Effect of NGF on the Survival of Rat Retinal Ganglion Cells Following Optic Nerve Section", *J. Neurosci.*, Vol. 9, 1989, pp 1263-72.

Chapin, D.M., *et al.*, "A New Silicon *p-n* Junction Photocell for Converting Solar Radiation into Electrical Power," Letters to the Editor, *Journal of Applied Physics*, Vol. 25, 1954, pp 676-7.

Chow, A.Y., "Electrical Stimulation of the Rabbit Retina with Subretinal Electrodes and High Density Microphotodiode Array Implants," ARVO Abstracts, *Invest. Ophthalmol. Vis. Sci.* 199334 (Suppl), page 835.

Chow, A.Y., Pardue, M.T., Chow, V.Y., Peyman, G.A., *et al.*, "Implantation of Silicon Chip Microphotodiode Arrays into the Cat Subretinal Space", *IEEE Trans. Neu. Syst. Rehabil. Eng.*, Vol. 9, 2001, pp 86-95.

Chow, A.Y., and Chow, V.Y., "Subretinal Electrical Stimulation of the Rabbit Retina", *Neurosci. Lett.* Vol. 225, 1997, pp 13-16.

Chow, A.Y., and Peachey, N., "The Subretinal Microphotodiode Array Retinal Prosthesis II", *Ophthalm. Res.*, Vol. 31, 1999, page 246.

Cui, Q., So, K.F., and Yip, H.K., "Major Biological Effects of Neurotrophic Factors on Retinal Ganglion Cells in Mammals", *Biol. Sig. Recept.*, Vol. 7, 1998, pp 220-226.

Curcio, C.A., Sloan, K.R., Kalina, R.E., Hendrickson, A.E., "Human Photoreceptor Topography," *J Comp. Neuro.*, Vol. 292, 1990, pp 497-523.

Dawson, W.W., Radtke, N.D., "The Electrical Stimulation of the Retina by Indwelling Electrodes," *Invest. Ophthalmol. Visual Sci.*, Vol. 16, 1997, pp 249-252.

Dooley, D.M., Sharkey, J., Keller, W., and Kasprak, W., "Treatment of Demyelinating and Degenerative Diseases by Electro Stimulation of the Spinal Cord", *Med. Prog. Technol.*, Vol. 6, 1978, pp 1-14.

Dowling, J.E., Ripps, H., Visual Adaptation in the Retina of the Skate," *J Gen Physiol.*, Vol. 56, 1970, pp 491-520.

Eagle, R.C., Lucier, A.C., Bernardino, V.B., *et al.*, "Retinal Pigment Epithelial Abnormalities in Fundus Flavimaculatus," *Ophthalmol.*, Vol. 87, 1980; pp 1189-1200.

Evans, R.D., Foltz, D., and Foltz, K., "Electrical Stimulation with Bone and Wound Healing", *Clin. Podiatr. Med. Surg.*, Vol. 18, 2001, pp 79-95.

Gibiliscos, S., and Sclater, N., *Encyclopedia of Electronics*, 2d Ed., 1990, pp. 640-645.



Fenwick, P.B.C., Stone, S.A., Bushman, J., Enderby, D., "Changes in the Pattern Reversal Visual Evoked Potential as a Function of Inspired Nitrous Oxide Concentration," *Electroencephalogr. Clin. Neurophysiol.*, Vol. 57, 1984, pp 57178-183.

John B. Flynn, et al. "Total Active Area Silicon Photodiode Array", 1964, 3 pages.

Frasson, M., Picaud, S., Leveillard, T., Simonutti, M., *et al.*, "Glial Cell Line-Derived Neurotrophic Factor Induces Histologic and Functional Protection of Rod Photoreceptors in the rd/rd Mouse", *Invest. Ophthalmol. Visual Sci.*, Vol. 40, 1999, pp 2724-34.

Graeme, J., "Position-Sensing Photodiode Amplifiers," Ch. 10, 12 pages.

Granit, R., Helme, T., "Changes in Retinal Excitability Due to Polarization and Some Observations on the Relation Between the Processes in Retina and Nerve," *J. Neurophysiol.*, Vol. 2, 1939, pp 556-565.

Hagins, W.A., Penn, R.D., Yoshikami, S., "Dark Current and Photocurrent in Retinal Rods," *J. Biophys.*, Vol. 10, 1970, pp 380-412.

Hergert, K., "Detectors: Expanded Photodetector Choices Pose Challenges for Designers", *The Photonics Design and Applications Handbook* (1996).

Humayun, M.S., Propst, R.H., Hickinbotham, D., de Juan E., Jr., Dagnelie G., "Visual Sensations Produced by Electrical Stimulation of the Retinal Surface in Patients with End-Stage Retinitis Pigmentosa (RP)," *ARVO Abstracts, Invest. Ophthalmol. Vis. Sci.*, Vol. 34 Suppl, 1993, page 835.

Humayun, M., Propst R., de Juan, E., et al., "Bipolar Surface Electrical Stimulation of the Vertebrate Retina," *Arch. Ophthalmol.*, Vol. 112, 1994, pp 110-116.  
Kane, W.J., "Direct Current Electrical Bone Growth Stimulation for Spinal Fusion", *Spine*, Vol. 13, 1988, pp 363-365.

Kataoka, S., "An Attempt Towards an Artificial Retina: 3-D IC Technology for an Intelligent Image Sensor," *Transducers '85: International Conference on Solid-State Sensors and Actuators 1985*, pp. 440-442.

Klinke, R., Kral, A., Heid, S., Tillein, J., and Hartmann, R., "Recruitment of the Auditory Cortex in Congenitally Deaf Cats by Long-Term Cochlear Electrostimulation", *Science*, Vol. 285, 1999, pp. 1729-1733.

Knighton, R.W., "An Electrically Evoked Slow Potential of the Frog's Retina. I. Properties of Response," *J. Neurophysiol.*, Vol. 38, 1975, pp 185-197.

Koyama, S., Haruyama, T., Kobatake, E., and Aizawa, M., "Electrically Induced NGF Production by Astroglial Cells", *Nature Biotechnol.*, Vol. 15, 1997, pp 164-166.

Lagey, C.L., Roelofs, J.M., Janssen, L.W.M., Breedijk, M., *et al.*, "Electrical Stimulation of Bone Growth with Direct Current", *Clin. Orthop.*, No. 204, 1986, pp 303-312.

Lambiase, A., and Aloe, L., "Nerve Growth Factor Delays Retinal Degeneration in C3H Mice", *Graefe's Arch. Clin. Exp. Ophthalmol.*, Vol. 234, 1996, pp 96-100.

Leake, P.A., Hradek, G.T., and Snyder, R.L., "Chronic Electrical Stimulation by a Cochlear Implant Promotes Survival of Spiral Ganglion Neurons after Neonatal Deafness", *J. Comp. Neurol.*, Vol. 412, 1999, pp 543-562.

Leake, P.A., Hradek, G.T., Rebscher, S.J., and Snyder, R.L., "Chronic Intracochlear Electrical Stimulation Induces Selective Survival of Spiral Ganglion Neurons in Neonatally Deafened Cats", *Hear. Res.*, Vol. 54, 1991, pp 251-271.

Lin, H-C., *et al.*, "The Vertical Integration of Crystalline NMOS and Amorphous Orientational Edge Detector" IEEE Briefs, 1992, 3 pages.

Melen, R.D., *et al.*, "A Transparent Electrode CCD Image Sensor for a Reading Aid for the Blind," *IEEE Journal of Solid-State Circuits*, Vol. SC-9, No.2, April 1974, pp. 41-48.

Narayanan, M.V., Rizzo, J.F., Edell, D., *et al.*, "Development of a Silicon Retinal Implant: Cortical Evoked Potentials Following Focal Stimulation of the Rabbit Retina with Light and Electricity," ARVO Abstracts, *Invest. Ophthalmol. Vis. Sci.*, Vol. 35 (Suppl), 1994, page 1380.

Neely, M.D., and Nicholls, J.G., "Electrical Activity, Growth Cone Motility and the Cytoskeleton", *J. Exp. Biol.* Vol. 198, 1995, pp 1433-1446.

Pagon, R.A., "Retinitis Pigmentosa," *Survey Ophthalmol.*, Vol. 33, 1988, pp 137-177.

Paton, D., Goldberg, M.F., *Management of Ocular Injuries*, Philadelphia, W.B. Saunders Co., 1976, pp 134-135.

Peachey, N.S., and Chow, A.Y., "Subretinal Implantation of Semiconductor-Based Photodiodes: Progress and Challenges", *J. Rehabil. Res. Develop.*, Vol. 36, No. 4, 1999, pp 1-7.

The Penguin Dictionary of Electronics, Editor: Illingworth, V., Young, C., Market House Books Ltd., 1988, pp. 410-413.

- Politis, M.J., Zanakis, M.F., and Albala, B.J., "Facilitated Regeneration in the Rat Peripheral Nervous System Using Applied Electric Fields", *J. Trauma*, Vol. 28, 1988, pp 1375-1381.
- Politis, M.J., Zanakis, M.F., and Albala, B.J., "Mammalian Optic Nerve Regeneration Following the Application of Electric Fields", *J. Trauma*, 1988, Vol. 28 pp 1548-1552.
- Politis, M.J., and Zanakis, M.F., "Short Term Efficacy of Applied Electric Fields in the Repair of the Damaged Rodent Spinal Cord: Behavioral and Morphological Results", *Neurosurgery*, Vol. 23, 1988, pp 582-588.
- Politis, M.J., and Zanakis, M.F., "The Short-Term Effects of Delayed Application of Electric Fields in the Damaged Rodent Spinal Cord", *Neurosurgery*, Vol. 25, 1989, pp 71-75.
- Politis, M.J., and Zanakis, M.F., "Treatment of the Damaged Rat Hippocampus with a Locally Applied Electric Field", *Exp. Brain Res.*, Vol. 71, 1988, pp 223-226.
- Potts, A.M., Inoue J., Buffum D., "The Electrically Evoked Response of the Visual System (EER)," *Invest. Ophthalmol Vis Sci.*, 1968; 7:269-278.
- Reh, T.A., McCabe, K., Kelley, M.W., and Bermingham-McDonogh, O., "Growth Factors in the Treatment of Degenerative Retinal Disorders", *Ciba Found. Symp.*, Vol. 196, 1996, pp 120-131.
- Robblee, L.S., *Electrochemical Guidelines for Selection of Protocols and Electrode Materials for Neural Stimulation*, Ch. 2, Renner Learning Resource Center (undated), pp 25-66.
- Rovamo, J., Virsu, V., "An Estimation and Application of the Human Cortical Magnification Factor," *Exp Brain Res.*, Vol. 37, 1979, pp 495-510.
- Rubin, M.L., *Optics for Clinicians*, Gainesville, TRIAD Scientific Publishers, 1974, pp 119-123.
- Shannon, R.V., "A Model of Safe Levels for Electrical Stimulation," *IEEE Transactions Biomed. Eng.*, Vol. 39, 1992, pp 424-426.
- Smith, J., "Creating a Bionic Eye", ABC News, 11/5/98, 3 pages.
- Stone, J.L., Barlow, W.E., Humayun, M.S., de Juan, E., Jr., Milam, A.H., "Morphometric Analysis of Macular Photoreceptor and Ganglion Cells in Retinas with Retinitis Pigmentosa," *Arch. Ophthalmol.*, Vol. 110, 1992, pp 1634-1639.

Sze, S.M., "Physics of Semiconductor Devices", 2<sup>nd</sup> Ed., A Wiley-Interscience Publication, John Wiley & Sons, (undated).

Tasman, E., ed. *Duane's Foundations of Clinical Ophthalmology, Volume 3*, Philadelphia, Lippincott, 1992; chapter 13:20-25, chapter 60:1-112.

Terr, L.I., Linthicum, F.H., House, W.F., "Histopathologic Study of the Cochlear Nuclei After 10 Years of Electrical Stimulation of the Human Cochlea," *Am. J. Otology.*, Vol. 9, 1988, pp 1-7.

Tomita, T., "Electrical Activity of Vertebrate Photoreceptor," *Q. Rev. Biophys.*, Vol. 3, 1970, pp. 179-222.

Zrenner, E., *et al.*, "The Development of Subretinal Microphotodiodes for Replacement of Degenerated Photoreceptors", *Ophthalmic Res.*, 1997, pp. 269-280.

Chow, A.Y., and Chow, V.Y., Copy of U.S. application serial No. 09/564,841 filed on May 4, 2002, 29 pages.

Majji, Ajit, *et al.*: "Long Term Histological and Electrophysiological Results of an Inactive Epiretinal Electrode Array Implantation in Dogs", *Investigative Ophthalmology & Visual Science*, August 1999, Vol. 40, No. 9, pp. 2073-2081.

Margalit, *et al.*: "Bioadhesives for Intraocular Use", *Retina, The Journal of Retinal and Vitreous Diseases*, 2000, Vol. 20, No. 5, pp. 469-477.

Peyman, Gholam, MD, *et al.*: "Subretinal Semiconductor Microphotodiode Array", *Ophthalmic Surgery and Lasers*, March 1998, Vol. 29, No. 3, pp. 234-241.

Copy of International Search Report for PCT/US02/20557 dated May 1, 2003.

Wen, R. *et al.*, "Injury-Induced Upregulation of bFGF and CNTF mRNAs in the Rat Retina", *The Journal of Neuroscience*, November 1995, pp. 7377-7385.

Copy of International Search Report for corresponding PCT/US02/20808 dated March 21, 2003.

- \* Miyoshi, Tomomitsu, Morimoto Takeshi, Fujikado, Takashi, Tano, Yasuo and Fukuda, Yutaka, "Inhibition of Neuronal Death of Retinal Ganglion Cell by Nerve Activation Using Electrical Stimulation", Vision Forum, 5<sup>th</sup> Annual Meeting, The Kitakyushu Science and Research Park Open Commemorative Project Assent: "Symposium of Visual Neuroscience and IT."

- \* Morimoto Takeshi, Miyoshi, Tomomitsu, Fujikado, Takashi, Tano, Yasuo and Fukuda, Yutaka, "Electrical stimulation enhances the survival of axotomized retinal ganglion cells *in vivo*", NEUROREPORT, Vol. 13, No. 2, 11 February 2002, pp. 227-230 and Erratum.
  - \* Yokoyama, Akiko, Oshitari, Toshiyuki, Negishi, Hisanari, Dezawa, Mari, Mizota, Atushi and Adachi-Usami, Emiko, "Protection of Retinal Ganglion Cells from Ischemia-Reperfusion Injury to Electrically Applied Hsp27," Investigative Ophthalmology & Visual Science, December 2001, Vol. 42, No. 13, pp. 3283-3286.
- A.Y. Chow, G.A. Peyman, J. Pulido, "*Safety and Feasibility of Subretinal Artificial Silicon Retina™ Retinal Prosthesis for the Treatment of Patients with Retinitis Pigmentosa*", ARVO (The Association of Research in Vision and Ophthalmology), Abstract Issue of Annual Meeting, Fort Lauderdale, Florida, April 29-May 4, 2001, Abstract 5042-11:11 (1 page and cover page), Published March 5, 2001.
- \* Fujikado, Takashi, "Suprachoroidal-Transretinal Stimulation Effectively Elicits Localized Evoked Potential in RCS Rats", The first DOE International Symposium on Artificial Sight, Speaker Abstracts, May 2, 2003, page 17.
  - \* Kanda, H., ARVO Presentation abstract entitled "Suprachoroidal-Transretinal Stimulation (STS) Can Elicit Localized Evoked Responses From the Superior Colliculus in Normal and RCS Rats", dated 2003.
  - \* Nakauichi, K., ARVO Presentation abstract entitled "Transretinal Electrical Stimulation by Intrasccleral Multichannel Electrode in Rabbit Eyes Reviewing Code: 237 retinal prostheses – RE", dated 2003.

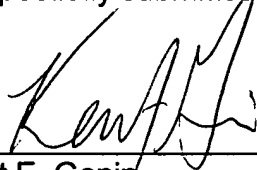
In accordance with 37 C.F.R. § 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

This Information Disclosure Statement is being filed prior to the receipt of the first Official Action reflecting an examination on the merits and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to

this material, the Commissioner is hereby authorized to deduct said fees from Brinks Hofer Gilson & Lione Deposit Account No. 23-1925. A duplicate copy of this document is enclosed.

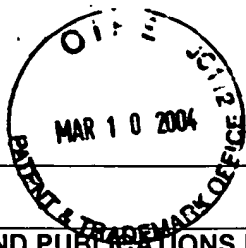
Applicant(s) respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Kent E. Genin', is written over a horizontal line.

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| FORM PTO-1449  | SERIAL NO.<br>10/606,117     | CASE NO.<br>3614/172   |
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| (use several sheets if necessary)  | APPLICANT(S): A. Chow        |                        |

**REFERENCE DESIGNATION**
**U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |     | DOCUMENT<br>NUMBER | DATE       | NAME                  | CLASS/<br>SUBCLASS | FILING<br>DATE |
|---------------------|-----|--------------------|------------|-----------------------|--------------------|----------------|
| *                   | A1  | 793,004            | 06/20/1905 | May                   |                    |                |
| *                   | A2  | 1,684,860          | 09/18/1928 | Catlin                |                    |                |
| *                   | A3  | 2,525,381          | 10/10/1950 | Tower                 |                    |                |
| *                   | A4  | 2,721,316          | 10/18/1955 | Shaw                  |                    |                |
|                     | A5  | 2,760,483          | 08/28/1956 | Tassicker             |                    |                |
| *                   | A6  | 3,320,947          | 05/23/1967 | Knoll                 |                    |                |
|                     | A7  | 3,594,823          | 07/27/1971 | Collins               |                    |                |
|                     | A8  | 3,628,193          | 12/21/1971 | Collins               |                    |                |
| *                   | A9  | 3,699,970          | 10/24/1972 | Brindley et al.       |                    |                |
|                     | A10 | 3,766,311          | 10/16/1973 | Boll                  |                    |                |
| *                   | A11 | 3,769,961          | 11/06/1973 | Fatt et al.           |                    |                |
|                     | A12 | 3,848,608          | 11/19/1974 | Leonard               |                    |                |
| *                   | A13 | 3,893,444          | 07/08/1975 | Fatt                  |                    |                |
|                     | A14 | 3,914,800          | 10/28/1975 | Collins               |                    |                |
| *                   | A15 | 3,995,635          | 12/07/1976 | Higuchi et al.        |                    |                |
| *                   | A16 | 3,998,659          | 12/21/1976 | Wakefield             |                    |                |
|                     | A17 | 4,001,867          | 01/04/1977 | Kravitz et al.        |                    |                |
| *                   | A18 | 4,018,218          | 04/19/1977 | Carlson et al.        |                    |                |
| *                   | A19 | 4,089,329          | 05/16/1978 | Couvillon, Jr. et al. |                    |                |
|                     | A20 | 4,211,474          | 07/08/1980 | Le Goff               |                    |                |
|                     | A21 | 4,251,887          | 02/24/1981 | Anis                  |                    |                |
| *                   | A22 | 4,271,841          | 06/09/1981 | Friedman              |                    |                |
|                     | A23 | 4,272,910          | 06/16/1981 | Danz                  |                    |                |
| *                   | A24 | 4,326,529          | 04/27/1982 | Doss et al.           |                    |                |
| *                   | A25 | 4,484,922          | 11/27/1984 | Rosenwald             |                    |                |
| *                   | A26 | 4,524,776          | 06/25/1985 | Withers et al.        |                    |                |
|                     | A27 | 4,551,149          | 11/05/1985 | Sciarra               |                    |                |
|                     | A28 | 4,600,004          | 07/15/1986 | Lopez et al.          |                    |                |
|                     | A29 | 4,601,545          | 07/22/1986 | Kern                  |                    |                |
| *                   | A30 | 4,603,697          | 08/05/1986 | Kamerling             |                    |                |
| *                   | A31 | 4,614,193          | 09/30/1986 | Liss et al.           |                    |                |
|                     | A32 | 4,628,933          | 12/16/1986 | Michelson             |                    |                |
| *                   | A33 | 4,664,117          | 05/12/1987 | Beck                  |                    |                |
| *                   | A34 | 4,667,676          | 05/26/1987 | Guinta                |                    |                |
|                     | A35 | 4,679,572          | 07/14/1987 | Baker, Jr.            |                    |                |
|                     | A36 | 4,750,498          | 06/14/1988 | Graham                |                    |                |
|                     | A37 | 4,810,050          | 03/07/1989 | Hooper                |                    |                |
|                     | A38 | 4,832,202          | 05/23/1989 | Newman et al.         |                    |                |

|          |                 |
|----------|-----------------|
| EXAMINER | DATE CONSIDERED |
|----------|-----------------|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

|  |                              |                        |
|--|------------------------------|------------------------|
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| (use several sheets if necessary)  | APPLICANT(S): A. Chow        |                        |

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |     | DOCUMENT<br>NUMBER | DATE       | NAME               | CLASS/<br>SUBCLASS | FILING<br>DATE |
|---------------------|-----|--------------------|------------|--------------------|--------------------|----------------|
|                     | A39 | 4,873,448          | 10/10/1989 | Shirai             |                    |                |
| *                   | A40 | 4,874,237          | 10/17/1989 | Cringle            |                    |                |
| *                   | A41 | 4,955,378          | 09/11/1990 | Grasso             |                    |                |
|                     | A42 | 4,978,842          | 12/18/1990 | Hinton et al.      |                    |                |
| *                   | A43 | 4,979,508          | 12/25/1990 | Beck               |                    |                |
| *                   | A44 | 4,989,605          | 02/05/1991 | Rossen             |                    |                |
|                     | A45 | 5,016,633          | 05/21/1991 | Chow               |                    |                |
|                     | A46 | 5,024,223          | 06/18/1991 | Chow               |                    |                |
| *                   | A47 | 5,025,811          | 06/25/1991 | Dobrogowski et al. |                    |                |
| *                   | A48 | 5,099,829          | 03/31/1992 | Wu                 |                    |                |
|                     | A49 | 5,109,844          | 05/05/1992 | de Juan Jr. et al. |                    |                |
| *                   | A50 | 5,109,846          | 05/05/1992 | Thomas             |                    |                |
|                     | A51 | 5,130,528          | 07/14/1992 | Phillips, Jr.      |                    |                |
|                     | A52 | 5,130,776          | 07/14/1992 | Popovic et al.     |                    |                |
| *                   | A53 | 5,147,284          | 09/15/1992 | Fedorov et al.     |                    |                |
| *                   | A54 | 5,154,174          | 10/13/1992 | Hawlina            |                    |                |
|                     | A55 | 5,159,927          | 11/03/1992 | Schmid             |                    |                |
| *                   | A56 | 5,174,304          | 12/29/1992 | Latina et al.      |                    |                |
|                     | A57 | 5,223,728          | 06/29/1993 | Gempe              |                    |                |
|                     | A58 | 5,256,882          | 10/26/1993 | Miyasaka           |                    |                |
|                     | A59 | 5,338,991          | 08/16/1994 | Lu                 |                    |                |
|                     | A60 | 5,351,309          | 09/27/1994 | Lee et al.         |                    |                |
| *                   | A61 | 5,360,438          | 11/01/1994 | Fisher             |                    |                |
|                     | A62 | 5,397,350          | 03/14/1995 | Chow et al.        |                    |                |
|                     | A63 | 5,411,540          | 05/02/1995 | Edell et al.       |                    |                |
|                     | A64 | 5,476,494          | 12/19/1995 | Edell et al.       |                    |                |
|                     | A65 | 5,491,349          | 02/13/1996 | Komoto et al.      |                    |                |
| *                   | A66 | 5,496,355          | 03/05/1996 | Lipsky             |                    |                |
| *                   | A67 | 5,522,864          | 06/04/1996 | Wallace et al.     |                    |                |
|                     | A68 | 5,556,423          | 09/17/1996 | Chow et al.        |                    |                |
| *                   | A69 | 5,578,040          | 11/26/1996 | Smith              |                    |                |
|                     | A70 | 5,648,655          | 07/15/1997 | Rostoker           |                    |                |
| *                   | A71 | 5,674,263          | 10/07/1997 | Yamamoto et al.    |                    |                |
|                     | A72 | 5,717,201          | 02/10/1998 | Lin et al.         |                    |                |
| *                   | A73 | 5,782,894          | 07/21/1998 | Israel             |                    |                |
|                     | A74 | 5,837,995          | 11/17/1998 | Chow et al.        |                    |                |
| *                   | A75 | 5,843,147          | 12/01/1998 | Testerman et al.   |                    |                |
|                     | A76 | 5,865,839          | 02/02/1999 | Doorish            |                    |                |
|                     | A77 | 5,895,414          | 04/20/1999 | Sanchez-Zambrano   |                    |                |
|                     | A78 | 5,895,415          | 04/20/1999 | Chow et al.        |                    |                |

|          |                 |
|----------|-----------------|
| EXAMINER | DATE CONSIDERED |
|----------|-----------------|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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| EXAMINER<br>INITIAL |     | DOCUMENT<br>NUMBER | DATE       | NAME             | CLASS/<br>SUBCLASS | FILING<br>DATE |
|---------------------|-----|--------------------|------------|------------------|--------------------|----------------|
|                     | A79 | 5,935,155          | 08/10/1999 | Humayun et al.   |                    |                |
|                     | A80 | 5,944,747          | 08/31/1999 | Greenberg et al. |                    |                |
| *                   | A81 | 6,006,756          | 12/28/1999 | Shaddock         |                    |                |
| *                   | A82 | 6,007,477          | 12/28/1999 | Demenezes        |                    |                |
|                     | A83 | 6,032,062          | 02/29/2000 | Nisch            |                    |                |
| *                   | A84 | 6,035,236          | 03/07/2000 | Jarding et al.   |                    |                |
|                     | A85 | 6,066,675          | 05/23/2000 | Wen et al.       |                    |                |
| *                   | A86 | 6,083,251          | 07/04/2000 | Shindo           |                    |                |
| *                   | A87 | 6,101,411          | 08/08/2000 | Newsome          |                    |                |
|                     | A88 | 6,230,057 B1       | 05/08/2001 | Chow et al.      |                    |                |
| *                   | A89 | 6,264,971 B1       | 07/24/2001 | Darougar et al.  |                    |                |
| *                   | A90 | 6,275,735 B1       | 08/14/2001 | Jarding et al.   |                    |                |
| *                   | A91 | 6,282,449 B1       | 08/28/2001 | Kamerling et al. |                    |                |
|                     | A92 | 6,298,270 B1       | 10/02/2001 | Nisch et al.     |                    |                |
|                     | A93 | 6,324,429 B1       | 11/27/2001 | Shire et al.     |                    |                |
|                     | A94 | 6,347,250 B1       | 02/12/2002 | Nisch et al.     |                    |                |
|                     | A95 | 6,389,317 B1       | 05/14/2002 | Chow et al.      |                    |                |
|                     | A96 | 6,393,327 B1       | 05/21/2002 | Scribner         |                    |                |
|                     | A97 | US 2002/014764 A1  | 10/10/2002 | Peyman           |                    |                |
| *                   | A98 | US 2003/0139784 A1 | 07/24/2003 | Morimoto et al.  |                    |                |

**FOREIGN PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |      | DOCUMENT<br>NUMBER | DATE       | COUNTRY       | CLASS/<br>SUBCLASS | TRANSLATION<br>YES OR NO |
|---------------------|------|--------------------|------------|---------------|--------------------|--------------------------|
|                     | A99  | DE 195 29 371 C2   | 02/13/1997 | Germany       |                    |                          |
|                     | A100 | GB 2 229 543 A     | 09/26/1990 | Great Britain |                    |                          |
|                     | A101 | EP 0 084 621 A2    | 11/23/1982 | EPO           |                    |                          |
|                     | A102 | EP 0 233 789       | 08/26/1987 | EPO           |                    |                          |
|                     | A103 | EP 0 501 904 A2    | 09/02/1992 | EPO           |                    |                          |
| *                   | A104 | EP 0 325 201 A2    | 07/26/1989 | Europe        |                    | Abstract Only            |
| *                   | A105 | JP A 8-154897      | 06/18/1996 | Japan         |                    | Abstract Only            |
| *                   | A106 | JP A 9-266954      | 10/14/1997 | Japan         |                    | Abstract Only            |
| *                   | A107 | JP A 2000-24122    | 01/25/2000 | Japan         |                    | Abstract Only            |
| *                   | A108 | RU 2 025 114 C1    | 12/30/1994 | Russia        |                    | Yes                      |
| *                   | A109 | RU 2 054 909 C1    | 02/27/1996 | Russia        |                    | Abstract                 |
| *                   | A110 | RU 2 062 080 C1    | 06/20/1996 | Russia        |                    | Yes (2)                  |
| *                   | A111 | RU 2 062 128 C1    | 06/20/1996 | Russia        |                    | Abstract                 |
| *                   | A112 | RU 2 063 199 C1    | 07/10/1996 | Russia        |                    | Yes                      |
| *                   | A113 | RU 2 072 815 C1    | 02/10/1997 | Russia        |                    | Yes                      |
| *                   | A114 | RU 2 074 681 C1    | 03/10/1997 | Russia        |                    | Abstract                 |

|          |                 |
|----------|-----------------|
| EXAMINER | DATE CONSIDERED |
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|---------------------|------|--------------------|------------|--------------|--------------------|--------------------------|
| *                   | A115 | RU 2 074 684 C1    | 03/10/1997 | Russia       |                    | Abstract                 |
| *                   | A116 | RU 2 077 291 C1    | 04/20/1997 | Russia       |                    | Yes                      |
| *                   | A117 | RU 2 086 216 C1    | 08/10/1997 | Russia       |                    | Abstract                 |
| *                   | A118 | RU 2 089 144 C1    | 09/10/1997 | Russia       |                    | Abstract                 |
| *                   | A119 | RU 2 090 167 C1    | 09/20/1997 | Russia       |                    | Abstract                 |
| *                   | A120 | RU 2 093 118 C1    | 10/20/1997 | Russia       |                    | Yes                      |
| *                   | A121 | RU 2 098 009 C1    | 12/10/1997 | Russia       |                    | Yes                      |
| *                   | A122 | RU 2 098 056 C1    | 12/10/1997 | Russia       |                    | Abstract                 |
| *                   | A123 | RU 2 102 046 C1    | 01/20/1998 | Russia       |                    | Yes                      |
| *                   | A124 | RU 2 128 485 C1    | 04/10/1999 | Russia       |                    | Abstract                 |
| *                   | A125 | RU 2 146 909 C1    | 12/17/1998 | Russia       |                    | Abstract                 |
| *                   | A126 | RU 2 161 019 C1    | 12/27/2000 | Russia       |                    | Yes                      |
| *                   | A127 | RU 2 177 766 C2    | 02/09/2000 | Russia       |                    | Abstract                 |
| *                   | A128 | RU 2 189 800 C2    | 03/01/2000 | Russia       |                    | Abstract                 |
| *                   | A129 | SU 1044283 A       | 09/30/1983 | Soviet Union |                    | Abstract                 |
| *                   | A130 | SU 1139446 A       | 02/15/1985 | Soviet Union |                    | Abstract                 |
| *                   | A131 | SU 1386208 A1      | 04/07/1988 | Soviet Union |                    | Abstract                 |
| *                   | A132 | SU 1395316 A2      | 05/15/1988 | Soviet Union |                    | Abstract                 |
| *                   | A133 | SU 1409264 A1      | 05/15/1988 | Soviet Union |                    | Abstract                 |
| *                   | A134 | SU 1757666 A1      | 08/30/1992 | Soviet Union |                    | Abstract                 |
| *                   | A135 | SU 1766401 A1      | 10/07/1992 | Soviet Union |                    | Yes                      |
| *                   | A136 | SU 1801021 A3      | 03/07/1993 | Soviet Union |                    | Abstract                 |
| *                   | A137 | SU 1826174 A1      | 11/10/1996 | Soviet Union |                    | Abstract                 |
| *                   | A138 | SU 1827222 A1      | 07/15/1993 | Soviet Union |                    | Abstract                 |
| *                   | A139 | SU 1833730 A1      | 08/15/1993 | Soviet Union |                    | Abstract                 |
| *                   | A140 | SU 1837858 A3      | 08/30/1993 | Soviet Union |                    | Abstract                 |
| *                   | A141 | SU 554863          | 04/25/1977 | Soviet Union |                    | Claim                    |
| *                   | A142 | SU 839529          | 06/23/1981 | Soviet Union |                    | Claim                    |
| *                   | A143 | SU 939020          | 06/30/1982 | Soviet Union |                    | Claim                    |
| *                   | A144 | 0 325 201 A2       | 07/26/1989 | Europe       |                    | Yes                      |
| *                   | A145 | WO 81/01511        | 06/11/1981 | PCT          |                    | Yes                      |

| EXAMINER<br>INITIAL | OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.) |  |
|---------------------|--|--|
|                     | A146   | Abrams, Dr. Susan B., "Implanted photodiodes could restore lost vision", <i>Biophotonics Research</i> , 1997, 2 pages.   |
|                     | A147   | Acheson, A., P.A. Barker, R.F. Alderson, F.D. Miller, et al., "Detection of Brain-Derived Neurotrophic Factor-Like Activity in Fibroblasts and Schwann Cells: Inhibition by Antibodies to NGF", <i>Neuron</i> , Vol. 7, 1991, pp 265-75. |

| EXAMINER | DATE CONSIDERED |
|----------|-----------------|
|----------|-----------------|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| EXAMINER<br>INITIAL | OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.) |  |
|---------------------|--|--|
|                     | A148   | Ando, Haruhisa, et al. "Design Consideration and Performance of a New MOS Imaging Device", <i>IEEE</i> , 1985, 6 pages.  |
|                     | A149   | Armington, J.C., Brigell, M., "Effects of Stimulus Location and Pattern Upon the Visually Evoked Cortical Potential and the Electroretinogram," <i>Intern. J. Neuroscience</i> , Vol. 14, 1981, pp 169-178.            |
|                     | A150   | Baylor, D.A., Fuortes, M.G.F., "Electrical Responses of Single Cones in the Retina of the Turtle," <i>J. Physiol</i> , Vol. 207, 1970, pp 77-92.   |
|                     | A151   | Bergmann-Schaefer, "Lehrbuch der Experimentalphysik" (Textbook of Experimental Physics), vol. II, "Electricity and Magnetism" by Prof. Dr. -Ing. H. Gobrecht, 1971, 3 pp. plus translation.                            |
|                     | A152   | Bobsch, M.D., Joseph M. and Grosser, Ph.D., Morton "Newer Repair at the AXOM Level: A Merger of Microsurgery and Microelectronics," VCH Publishers, Inc., 1967.  |
|                     | A153   | Boettner, E.A., Wolter, J.R., "Transmission of the Ocular Media," <i>Investigative Ophthalmology</i> , Vol. 1, 1962, pp 776-783.   |
|                     | A154   | Bosco, A., and Linden, R., "BDNF and NT-4 Differentially Modulate Neurite Outgrowth in Developing Retinal Ganglion Cells", <i>J Neurosci Res</i> . Vol. 57, 1999, pp 759-69.   |
|                     | A155   | Brady, G.S., Clauser, H.R., <i>Materials Handbook, Thirteenth Edition</i> , New York, McGraw-Hill, 1991, pp 739-740.   |
|                     | A156   | Brindley, G.S., "The Site of Electrical Excitation of the Human Eye," <i>J. Physiol.</i> , Vol. 127, 1955, pp 189-200.   |
|                     | A157   | Brindley, G.S., "Beats Produced by Simultaneous Stimulation of the Human Eye with Intermittent Light and Intermittent or Alternating Electric Current," <i>J. Physiol.</i> , Vol. 164, 1962, pp 156-167.               |
|                     | A158   | Brown, M.G. et al., "Monolithically Integrated 1 x 12 Array of Planar InGaAs/InP Photodiodes," <i>Journal of Lightwave Technology</i> , Vol. LT-4, No. 3, March 1986, pp. 283-286.                                     |
|                     | A159   | Caleo, M., Lodovichi, C., and Maffei, L., "Effects of Nerve Growth Factor on Visual Cortical Plasticity Require Afferent Electrical Activity", <i>Eur. J. Neurosci.</i> , Vol. 11, 1999, pp 2979-84.                   |
|                     | A160   | Carmignoto, G., Maffei, L., Candeo, P., Canella, R. and Comelli, C., "Effect of NGF on the Survival of Rat Retinal Ganglion Cells Following Optic Nerve Section", <i>J. Neurosci.</i> , Vol. 9, 1989, pp 1263-72.      |
|                     | A161   | Chapin, D.M., et al., "A New Silicon <i>p-n</i> Junction Photocell for Converting Solar Radiation into Electrical Power," Letters to the Editor, <i>Journal of Applied Physics</i> , Vol. 25, 1954, pp 676-7.          |
|                     | A162   | Chow, A.Y., "Electrical Stimulation of the Rabbit Retina with Subretinal Electrodes and High Density Microphotodiode Array Implants," ARVO Abstracts, <i>Invest. Ophthalmol. Vis. Sci.</i> 199334 (Suppl), page 835.   |
|                     | A163   | Chow, A.Y., Pardue, M.T., Chow, V.Y., Peyman, G.A., et al., "Implantation of Silicon Chip Microphotodiode Arrays into the Cat Subretinal Space", <i>IEEE Trans. Neu. Syst. Rehabil. Eng.</i> , Vol. 9, 2001, pp 86-95. |
|                     | A164   | Chow, A.Y., and Chow, V.Y., "Subretinal Electrical Stimulation of the Rabbit Retina", <i>Neurosci. Lett.</i> Vol. 225, 1997, pp 13-16.   |
|                     | A165   | Chow, A.Y., and Peachey, N., "The Subretinal Microphotodiode Array Retinal Prosthesis II", <i>Ophthal. Res.</i> , Vol. 31, 1999, page 246.   |

|          |                 |
|----------|-----------------|
| EXAMINER | DATE CONSIDERED |
|----------|-----------------|

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| EXAMINER<br>INITIAL | OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.) |  |
|---------------------|--|--|
|                     | A166   | Cui, Q., So, K.F., and Yip, H.K., "Major Biological Effects of Neurotrophic Factors on Retinal Ganglion Cells in Mammals", <i>Biol. Sig. Recept.</i> , Vol. 7, 1998, pp 220-226.   |
|                     | A167   | Curcio, C.A., Sloan, K.R., Kalina, R.E., Hendrickson, A.E., "Human Photoreceptor Topography," <i>J Comp. Neuro.</i> , Vol. 292, 1990, pp 497-523.  |
|                     | A168   | Dawson, W.W., Radtke, N.D., "The Electrical Stimulation of the Retina by Indwelling Electrodes," <i>Invest. Ophthalmol. Visual Sci.</i> , Vol. 16, 1997, pp 249-252.   |
|                     | A169   | Dooley, D.M., Sharkey, J., Keller, W., and Kasprak, W., "Treatment of Demyelinating and Degenerative Diseases by Electro Stimulation of the Spinal Cord", <i>Med. Prog. Technol.</i> , Vol. 6, 1978, pp 1-14.  |
|                     | A170   | Dowling, J.E., Ripps, H., Visual Adaptation in the Retina of the Skate," <i>J Gen Physiol.</i> , Vol. 56, 1970, pp 491-520.  |
|                     | A171   | Eagle, R.C., Lucier, A.C., Bernardino, V.B., <i>et al.</i> , "Retinal Pigment Epithelial Abnormalities in Fundus Flavimaculatus," <i>Ophthalmol.</i> , Vol. 87, 1980; pp 1189-1200.  |
|                     | A172   | Evans, R.D., Foltz, D., and Foltz, K., "Electrical Stimulation with Bone and Wound Healing", <i>Clin. Podiatr. Med. Surg.</i> , Vol. 18, 2001, pp 79-95.   |
|                     | A173   | Gibiliscos, S., and Sclater, N., Encyclopedia of Electronics, 2d Ed., 1990, pp. 640-645.   |
|                     | A174   | Fenwick, P.B.C., Stone, S.A., Bushman, J., Enderby, D., "Changes in the Pattern Reversal Visual Evoked Potential as a Function of Inspired Nitrous Oxide Concentration," <i>Electroencephalogr. Clin. Neurophysiol.</i> , Vol. 57, 1984, pp 57178-183.   |
|                     | A175   | John B. Flynn, <i>et al.</i> "Total Active Area Silicon Photodiode Array", 1964, 3 pages.  |
|                     | A176   | Frasson, M., Picaud, S., Leveillard, T., Simonutti, M., <i>et al.</i> , "Glial Cell Line-Derived Neurotrophic Factor Induces Histologic and Functional Protection of Rod Photoreceptors in the rd/rd Mouse", <i>Invest. Ophthalmol. Visual Sci.</i> , Vol. 40, 1999, pp 2724-34.                       |
|                     | A177   | Graeme, J., "Position-Sensing Photodiode Amplifiers," Ch. 10, 12 pages   |
|                     | A178   | Granit, R., Helme, T., "Changes in Retinal Excitability Due to Polarization and Some Observations on the Relation Between the Processes in Retina and Nerve," <i>J. Neurophysiol.</i> , Vol. 2, 1939, pp 556-565.  |
|                     | A179   | Hagins, W.A., Penn, R.D., Yoshikami, S., "Dark Current and Photocurrent in Retinal Rods," <i>J. Biophys.</i> , Vol. 10, 1970, pp 380-412.  |
|                     | A180   | Hergert, K., "Detectors: Expanded Photodetector Choices Pose Challenges for Designers", <i>The Photonics Design and Applications Handbook</i> (1996).  |
|                     | A181   | Humayun, M.S., Propst, R.H., Hickinbotham, D., de Juan E., Jr., Dagnelie G., "Visual Sensations Produced by Electrical Stimulation of the Retinal Surface in Patients with End-Stage Retinitis Pigmentosa (RP)," ARVO Abstracts, <i>Invest. Ophthalmol. Vis. Sci.</i> , Vol. 34 Suppl, 1993, page 835. |
|                     | A182   | Humayun, M., Propst R., de Juan, E., <i>et al.</i> , "Bipolar Surface Electrical Stimulation of the Vertebrate Retina," <i>Arch. Ophthalmol.</i> , Vol. 112, 1994, pp 110-116.   |
|                     |  | Kane, W.J., "Direct Current Electrical Bone Growth Stimulation for Spinal Fusion", <i>Spine</i> , Vol. 13, 1988, pp 363-365.   |
|                     | A183   | Kataoka, S., "An Attempt Towards an Artificial Retina: 3-D IC Technology for an Intelligent Image Sensor," <i>Transducers '85: International Conference on Solid-State Sensors and Actuators 1985</i> , pp. 440-442.   |

|          |                 |
|----------|-----------------|
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|----------|-----------------|

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| EXAMINER<br>INITIAL | OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.) |   |
|---------------------|--|---|
|                     | A184   | Klinke, R., Kral, A., Heid, S., Tillein, J., and Hartmann, R., "Recruitment of the Auditory Cortex in Congenitally Deaf Cats by Long-Term Cochlear Electrostimulation", <i>Science</i> , Vol. 285, 1999, pp. 1729-1733.   |
|                     | A185   | Knighton, R.W., "An Electrically Evoked Slow Potential of the Frog's Retina. I. Properties of Response," <i>J. Neurophysiol.</i> , Vol. 38, 1975, pp 185-197.   |
|                     | A186   | Koyama, S., Haruyama, T., Kobatake, E., and Aizawa, M., "Electrically Induced NGF Production by Astroglial Cells", <i>Nature Biotechnol.</i> , Vol. 15, 1997, pp 164-166.   |
|                     | A187   | Lagey, C.L., Roelofs, J.M., Janssen, L.W.M., Breedijk, M., <i>et al.</i> , "Electrical Stimulation of Bone Growth with Direct Current", <i>Clin. Orthop.</i> , No. 204, 1986, pp 303-312.   |
|                     | A188   | Lambiase, A., and Aloe, L., "Nerve Growth Factor Delays Retinal Degeneration in C3H Mice", <i>Graefe's Arch. Clin. Exp. Ophthalmol.</i> , Vol. 234, 1996, pp 96-100.  |
|                     | A189   | Leake, P.A., Hradek, G.T., and Snyder, R.L., "Chronic Electrical Stimulation by a Cochlear Implant Promotes Survival of Spiral Ganglion Neurons after Neonatal Deafness", <i>J. Comp. Neurol.</i> , Vol. 412, 1999, pp 543-562.   |
|                     | A190   | Leake, P.A., Hradek, G.T., Rebscher, S.J., and Snyder, R.L., "Chronic Intracochlear Electrical Stimulation Induces Selective Survival of Spiral Ganglion Neurons in Neonatally Deafened Cats", <i>Hear. Res.</i> , Vol. 54, 1991, pp 251-271.   |
|                     | A191   | Lin, H-C., <i>et al.</i> , "The Vertical Integration of Crystalline NMOS and Amorphous Orientational Edge Detector" IEEE Briefs, 1992, 3 pages.   |
|                     | A192   | Melen, R.D., <i>et al.</i> , "A Transparent Electrode CCD Image Sensor for a Reading Aid for the Blind," <i>IEEE Journal of Solid-State Circuits</i> , Vol. SC-9, No.2, April 1974, pp. 41-48.  |
|                     | A193   | Narayanan, M.V., Rizzo, J.F., Edell, D., <i>et al.</i> , "Development of a Silicon Retinal Implant: Cortical Evoked Potentials Following Focal Stimulation of the Rabbit Retina with Light and Electricity," ARVO Abstracts, <i>Invest. Ophthalmol. Vis. Sci.</i> , Vol. 35 (Suppl), 1994, page 1380. |
|                     | A194   | Neely, M.D., and Nicholls, J.G., "Electrical Activity, Growth Cone Motility and the Cytoskeleton", <i>J. Exp. Biol.</i> Vol. 198, 1995, pp 1433-1446.   |
|                     | A195   | Pagon, R.A., "Retinitis Pigmentosa," <i>Survey Ophthalmol.</i> , Vol. 33, 1988, pp 137-177.   |
|                     | A196   | Paton, D., Goldberg, M.F., <i>Management of Ocular Injuries</i> , Philadelphia, W.B. Saunders Co., 1976, pp 134-135.  |
|                     | A197   | Peachey, N.S., and Chow, A.Y., "Subretinal Implantation of Semiconductor-Based Photodiodes: Progress and Challenges", <i>J. Rehabil. Res. Develop.</i> , Vol. 36, No. 4, 1999, pp 1-7.  |
|                     | A198   | The Penguin Dictionary of Electronics, Editor: Illingworth, V., Young, C., Market House Books Ltd., 1988, pp. 410-413.  |
|                     | A199   | Politis, M.J., Zanakis, M.F., and Albala, B.J., "Facilitated Regeneration in the Rat Peripheral Nervous System Using Applied Electric Fields", <i>J. Trauma.</i> , Vol. 28, 1988, pp 1375-1381.   |
|                     | A200   | Politis, M.J., Zanakis, M.F., and Albala, B.J., "Mammalian Optic Nerve Regeneration Following the Application of Electric Fields", <i>J. Trauma.</i> , 1988, Vol. 28 pp 1548-1552.  |
|                     | A201   | Politis, M.J., and Zanakis, M.F., "Short Term Efficacy of Applied Electric Fields in the Repair of the Damaged Rodent Spinal Cord: Behavioral and Morphological Results", <i>Neurosurgery</i> , Vol. 23, 1988, pp 582-588.  |

|          |                 |
|----------|-----------------|
| EXAMINER | DATE CONSIDERED |
|----------|-----------------|

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|---------------------|--|---|
|                     | A202   | Politis, M.J., and Zanakis, M.F., "The Short-Term Effects of Delayed Application of Electric Fields in the Damaged Rodent Spinal Cord", <i>Neurosurgery</i> , Vol. 25, 1989, pp 71-75.  |
|                     | A203   | Politis, M.J., and Zanakis, M.F., "Treatment of the Damaged Rat Hippocampus with a Locally Applied Electric Field", <i>Exp. Brain Res.</i> , Vol. 71, 1988, pp 223-226.   |
|                     | A204   | Potts, A.M., Inoue J., Buffum D., "The Electrically Evoked Response of the Visual System (EER)", <i>Invest. Ophthalmol Vis Sci.</i> , 1968; 7:269-278.  |
|                     | A205   | Reh, T.A., McCabe, K., Kelley, M.W., and Bermingham-McDonogh, O., "Growth Factors in the Treatment of Degenerative Retinal Disorders", <i>Ciba Found. Symp.</i> , Vol. 196, 1996, pp 120-131.   |
|                     | A206   | Robblee, L.S., Electrochemical Guidelines for Selection of Protocols and Electrode Materials for Neural Stimulation, Ch. 2, Renner Learning Resource Center (undated), pp 25-66.  |
|                     | A207   | Rovamo, J., Virsu, V., "An Estimation and Application of the Human Cortical Magnification Factor," <i>Exp Brain Res.</i> , Vol. 37, 1979, pp 495-510.   |
|                     | A208   | Rubin, M.L., <i>Optics for Clinicians</i> , Gainesville, TRIAD Scientific Publishers, 1974, pp 119-123.   |
|                     | A209   | Shannon, R.V., "A Model of Safe Levels for Electrical Stimulation," <i>IEEE Transactions Biomed. Eng.</i> , Vol. 39, 1992, pp 424-426.  |
|                     | A210   | Smith, J., "Creating a Bionic Eye", ABC News, 11/5/98, 3 pages.   |
|                     | A211   | Stone, J.L., Barlow, W.E., Humayun, M.S., de Juan, E., Jr., Milam, A.H., "Morphometric Analysis of Macular Photoreceptor and Ganglion Cells in Retinas with Retinitis Pigmentosa," <i>Arch. Ophthalmol.</i> , Vol. 110, 1992, pp 1634-1639.         |
|                     | A212   | Sze, S.M., "Physics of Semiconductor Devices", 2 <sup>nd</sup> Ed., A Wiley-Interscience Publication, John Wiley & Sons, (undated).   |
|                     | A213   | Tasman, E., ed. <i>Duane's Foundations of Clinical Ophthalmology, Volume 3</i> , Philadelphia, Lippincott, 1992; chapter 13:20-25, chapter 60:1-112.  |
|                     | A214   | Terr, L.I., Linthicum, F.H., House, W.F., "Histopathologic Study of the Cochlear Nuclei After 10 Years of Electrical Stimulation of the Human Cochlea," <i>Am. J. Otolaryng.</i> , Vol. 9, 1988, pp 1-7.  |
|                     | A215   | Tomita, T., "Electrical Activity of Vertebrate Photoreceptor," <i>Q. Rev. Biophys.</i> , Vol. 3, 1970, pp. 179-222.   |
|                     | A216   | Zrenner, E., et al., "The Development of Subretinal Microphotodiodes for Replacement of Degenerated Photoreceptors", <i>Ophthalmic Res.</i> , 1997, pp. 269-280.  |
|                     | A217   | Chow, A.Y., and Chow, V.Y., Copy of U.S. application serial No. 09/564,841 filed on May 4, 2002, 29 pages.  |
|                     | A218   | Majji, Ajit, et al.: "Long Term Histological and Electrophysiological Results of an Inactive Epiretinal Electrode Array Implantation in Dogs", <i>Investigative Ophthalmology &amp; Visual Science</i> , August 1999, Vol. 40, No. 9, pp. 2073-2081 |
|                     | A219   | Margalit, et al.: "Bioadhesives for Intraocular Use", <i>Retina, The Journal of Retinal and Vitreous Diseases</i> , 2000, Vol. 20, No. 5, pp. 469-477   |
|                     | A220   | Peyman, Gholam, MD, et al.: "Subretinal Semiconductor Microphotodiode Array", <i>Ophthalmic Surgery and Lasers</i> , March 1998, Vol. 29, No. 3, pp. 234-241  |
|                     | A221   | Copy of International Search Report for PCT/US02/20557 dated May 1, 2003.   |
|                     | A222   | Wen, R. et al., "Injury-Induced Upregulation of bFGF and CNTF mRNAs in the Rat Retina", <i>The Journal of Neuroscience</i> , November 1995, pp. 7377-7385.  |

|          |                 |
|----------|-----------------|
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|---------------------|--|--|
|                     | A223   | Copy of International Search Report for corresponding PCT/US02/20808 dated March 21, 2003.   |
| *                   | A224   | Miyoshi, Tomomitsu, Morimoto Takeshi, Fujikado, Takashi, Tano, Yasuo and Fukuda, Yutaka, "Inhibition of Neuronal Death of Retinal Ganglion Cell by Nerve Activation Using Electrical Stimulation", Vision Forum, 5 <sup>th</sup> Annual Meeting, The Kitakyushu Science and Research Park Open Commemorative Project Assent: "Symposium of Visual Neuroscience and IT."                                  |
| *                   | A225   | Morimoto Takeshi, Miyoshi, Tomomitsu, Fujikado, Takashi, Tano, Yasuo and Fukuda, Yutaka, "Electrical stimulation enhances the survival of axotomized retinal ganglion cells <i>in vivo</i> ", NEUROREPORT, Vol. 13, No. 2, 11 February 2002, pp. 227-230 and Erratum.  |
| *                   | A226   | Yokoyama, Akiko, Oshitari, Toshiyuki, Negishi, Hisanari, Dezawa, Mari, Mizota, Atushi and Adachi-Usami, Emiko, "Protection of Retinal Ganglion Cells from Ischemia-Reperfusion Injury to Electrically Applied Hsp27," Investigative Ophthalmology & Visual Science, December 2001, Vol. 42, No. 13, pp. 3283-3286.   |
|                     | A227   | A.Y. Chow, G.A. Peyman, J. Pulido, "Safety and Feasibility of Subretinal Artificial Silicon Retina™ Retinal Prosthesis for the Treatment of Patients with Retinitis Pigmentosa", ARVO (The Association of Research in Vision and Ophthalmology), Abstract Issue of Annual Meeting, Fort Lauderdale, Florida, April 29-May 4, 2001, Abstract 5042-11:11 (1 page and cover page), Published March 5, 2001. |
| *                   | A228   | Fujikado, Takashi, "Suprachoroidal-Transretinal Stimulation Effectively Elicits Localized Evoked Potential in RCS Rats", The first DOE International Symposium on Artificial Sight, Speaker Abstracts, May 2, 2003, page 17  |
| *                   | A229   | Kanda, H., ARVO Presentation abstract entitled "Suprachoroidal-Transretinal Stimulation (STS) Can Elicit Localized Evoked Responses From the Superior Colliculus in Normal and RCS Rats", dated 2003   |
| *                   | A230   | Nakauichi, K., ARVO Presentation abstract entitled "Transretinal Electrical Stimulation by Intrasccleral Multichannel Electrode in Rabbit Eyes Reviewing Code: 237 retinal prostheses – RE", dated 2003  |

|          |                 |
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